

AUG 28 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

TRAN

Application No.: 10/764,647

Filed: 1/26/2004

Title: SYSTEMS AND METHODS FOR
ANALYZING DOCUMENTS

Examiner: SINGH, RACHNA

Art Unit: 2176

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Brief is presented in support of the Notice of Appeal from the final rejection of Claims 1-21 of the above-identified application, as set forth in the Final Office Action.

REAL PARTY OF INTEREST

The Real Party of Interest is Applicant Bao Tran.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences for the above-referenced patent application.

STATUS OF CLAIMS

Claims 1-21 are pending and are the subject of this Appeal. All claims have been rejected. Claims 1-21 are the subject of this appeal. No other claims are pending.

08/29/2006 TLD111 00000003 10764647

01 FC:2402

250:00 OP

STATUS OF AMENDMENTS

All claims as renumbered were rejected in a Final Office Action. A Notice of Appeal was filed requesting a Pre-Appeal Brief Request for Review filed 8-3-2006. The application remains under appeal.

SUMMARY OF CLAIMED SUBJECT MATTER

The claimed subject matter relates to an electronic document with first, second and third portions. The document is generated by embedding one or more links in the first portion referencing one or more external documents viewable using a viewer application and embedding one or more links in the third portion referencing information contained in the second portion. Advantages of the invention may include one or more of the following. The annotated document is easier to interpret since relevant information is parsed and visually provided to the user. Further, external information such as information from external documents and file history can be incorporated to ease interpretation. (Page 4, lines 2-9).

Claim 1 recites a method for providing an electronic document having first, second and third portions, comprising: embedding one or more links in the first portion referencing one or more external documents viewable using a viewer application (embodiments are described in Figs. 2A-2B, page 7, line 21-page 8, line 3); and embedding one or more links in the third portion referencing information contained in the second portion (embodiments are described in Figs. 2A-2B, Fig. 4 item 406, page 7 line 21-page 8 line 3, page 9 lines 16-23, page 14 lines 10-11).

The links in the third portion referencing information in the second portion help a user in interpreting the document. In one embodiment, the system parses text in a third portion for terminology such as text or noun phrases, among others (210). In one embodiment, the process cross-references each discussion of each parsed noun phrase in a second portion of the document (212). The process then links the noun phrase to the cross-referenced discussion (214). In this manner, the process shows consistent and/or inconsistent references to noun phrases in the third portion so that a user can quickly understand potential ambiguities in the document. Items mentioned in the drawings can also be cross-referenced. (page 9, lines 16-23).

Claim 19 recites an apparatus for providing an electronic document having first, second and third portions having one or more links embedded in the first portion referencing one or more external documents viewable using a viewer application (embodiments are disclosed in Figs. 2A-

2B, page 7, line 21-page 8, line 3); one or more links embedded in the third portion referencing information contained in the second portion (embodiments are described in Figs. 2A-2B, Fig. 4 item 406, page 7 line 21-page 8 line 3, page 9 lines 16-23, page 14 lines 10-11).

Claim 20 recites a system for providing access to a document stored in a computer-readable medium and executable by a computer, comprising: one or more links embedded in the first portion referencing one or more external documents viewable using a viewer application (embodiments are described in Figs. 2A-2B, page 7, line 21-page 8, line 3); one or more links embedded in the third portion referencing information contained in the second portion (embodiments are described in Figs. 2A-2B, Fig. 4 item 406, page 7 line 21-page 8 line 3, page 9 lines 16-23, page 14 lines 10-11).

Claim 21 recites a computer readable media containing executable computer program instructions which when executed on a digital processing system causes the system to perform a method including embedding one or more links in the first portion referencing one or more external documents viewable using a viewer application (embodiments are shown in Figs. 2A-2B, page 7, line 21-page 8, line 3); and embedding one or more links in the third portion referencing information contained in the second portion (embodiments are described in Figs. 2A-2B, Fig. 4 item 406, page 7 line 21-page 8 line 3, page 9 lines 16-23, page 14 lines 10-11).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

- I. CLAIMS 1-7, 10, 12-15, AND 19-21 ARE UNPATENTABLE UNDER 35 U.S.C. 103(A) OVER GONZALES, US 2002/0161603 IN VIEW OF SWEET, US 6,567,799 B2
- II. CLAIMS 8-9 ARE UNPATENTABLE UNDER 35 U.S.C. 103(A) OVER GONZALES IN VIEW OF SWEET ET AL AND FOQEL ET AL., US 2004/0059994
- III. CLAIMS 16-17 ARE UNPATENTABLE UNDER 35 U.S.C. 103(A) OVER GONZALES IN VIEW OF SWEET ET AL. AND MAHONEY ET AL., US 5,999,664.
- IV. CLAIM 18 IS UNPATENTABLE OVER GONZALES, IN VIEW OF SWEET ET AL., AND FURTHER IN VIEW OF BARGERON ET AL., US 2004/0205542 AL, 10/14/04.

ARGUMENT**I. CLAIMS 1-7, 10, 12-15, AND 19-21 ARE PATENTABLE UNDER 35 U.S.C. 103(A) OVER GONZALES, US 2002/0161603 IN VIEW OF SWEET, US 6,567,799 B2**

Claims 1-7, 10, 12-15 and 19-21 were rejected under Section 103(a) over Gonzales and Sweet. With respect to the independent claims, the Office Action noted that:

In reference to claims 1 and 19-21, Gonzales teaches an interactive publishing system for providing content management. Gonzales teaches a browser-based publishing tool allows a user to create a document that includes a hyperlink enabling a person viewing the document to navigate from a first point in the document to a second point in the document, or further to another document. See page 1, paragraph [0007]. Gonzales further teaches a web page (i.e. document) include areas designated to contain content e.g., text and images, or to provide navigation bars (nav) from a presently displayed page to another. These areas can comprise several regions. See figure 2. A hyperlink, or link, is a text or image area on which a user can click to connect to or reference another document or content component. A link can connect two web pages, i.e., an internal link, or two websites, i.e., an external link. See page 3, paragraphs [0045]-[0047] and figure 2. Compare to "embedding one or more links in the first portion referencing one or more external documents" and "embedding one or more links in the third portion referencing information contained in the second portion".

Applicant respectfully traverses the assertion. Here, neither Gonzales nor Sweet shows each element in the independent claim 1. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Paragraph 7 of Gonzales states: "A typical browser-based publishing tool allows a user to create a document that includes a hyperlink enabling a person viewing the document to navigate from a first point in the document to a second point in the document, or further, to another document. In a case where a first document is being viewed on a web site, the hyperlink may provide a link to a second document on a different web site." Gonzales is used to design web pages with links to other pages or web sites, as noted in paragraphs 46-47. Gonzales' FIG. 2

shows typical web page links and is reproduced below for the Panel's convenience:

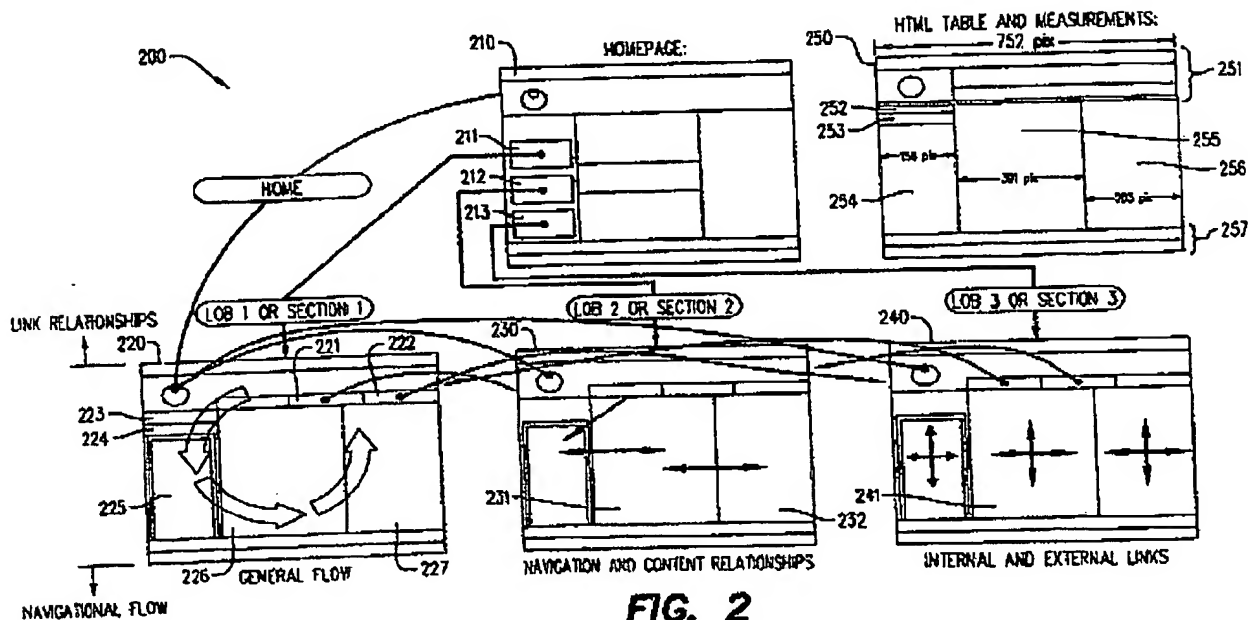


FIG. 2

As stated in paragraph 0057:

LOB page 230 is shown with several double-headed arrows. Similarly to the wide arrows shown on LOB page 220, these arrows represent a hierarchical organization of content between various areas of a web page. For example, a user who is viewing LOB page 230 will often have a tendency to regard main content in area 231 as being related to related content or navigation in area 232.

The Examiner noted on pages 15-16 of the Final Office Action that "Gonzales teaches a document comprising several regions which is the same as a document having one portion, a second portion, and a third portion." This is true for Web pages in general. However, Web pages typically jump to other pages and all web pages cannot be scrolled and viewed sequentially, one page after another, like a typical document. For example, patent documents recited in claim 6 are viewed in sequence in paper and in electronic version such as PDF document and are not viewed as a collection of web pages for the reason that readers prefer to read a document that is continuous like a book rather than hyperlinked pages such as web pages. Hence, the Final Office Action's comparison of Gonzales with the instant electronic document is rather inapposite.

Turning now to the rejection of claim 1, the Examiner cannot show that Gonzales teaches one or more links in the first portion referencing one or more external documents viewable using a viewer application; (as admitted in the Final Office Action and discussed below). Further, the

Examiner cannot show that Gonzales teaches one or more links in the third portion referencing information contained in the second portion.

The links in Gonzales provide flow and navigation among the pages, but Gonzales fails to teach links in the third portion referencing information contained in the second portion. To illustrate, as discussed in the Summary of Claimed Subject Matter, the links from the third portion cross-references information in the second portion to enable a viewer to interpret occurrences of noun phrases recited in the third section and discussed in the second section, for example. Lacking the express teaching of links in the third portion referencing information in the second portion, Gonzales cannot provide this functionality.

The Office Action further asserts that:

Gonzales does not expressly teach the one or more external documents are "viewable using a viewer application"; although he does teach viewing the documents via a browser. Sweet teaches retrieving documents linked to an initial document. Sweet teaches in response to a request from a user, a PDF viewer may retrieve from one or more web servers an initial document specified by a URL and other documents which are linked to the initial document. See column 8, lines 26-50. The PDF document is displayed by the PDF viewer. See column 8, lines 26-50. Compare to "documents viewable using a viewer application". It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a viewer application to view documents referenced in Gonzales' system because it was desirable to provide a means to convert a semantic markup representation of a document into a physical markup representation of the document (i.e. PDF) as it provides a common and convenient way for display data to be stored as a single document, having a fixed page size. See columns 3-4 of Sweet.

Applicant also traverses this assertion. Sweet relates to techniques where all of the documents which are linked to a document and also in the same directory path can be retrieved from a file system. Sweet describes a system to incorporate user selected Web page links into a single integrated PDF document.

However, Gonzales in view of Sweet fails to describe an electronic document having first, second and third portions. The combination of Sweet with Gonzales would result in web pages with links that can "connect two web pages, i.e., an internal link, or two web sites, i.e., an external link" (Gonzales paragraph 47) and links that would bring up a PDF (Sweet Col. 8, lines 26-50). However, such combination would not provide the specific structure and connections between the claimed structures, namely links in the first portion referencing one or more external documents viewable using a viewer application; and links in the third portion referencing information contained in the second portion.

The references are simply silent on the specific structure recited in claim 1 as they do not address the interpretation requirements for language used in the third portion and the second portion. Any inferences alleged by the Final Office Action use hindsight taught by the teachings of the instant invention. Moreover, if combined, the result is non-functional as it fails to provide the functionality of the system. The specific first, second and third portions where the first portion links reference external documents and third portion links referencing information in the second portion become important for certain types of documents such as IP documents. In one exemplary embodiment recited in claim 6, the electronic document can be a patent or a patent application and the first portion comprises a prior art section, the second portion comprises a description section, and the third portion comprises a claim section, the document cross-references an element in the claim section against one or more references to the element in the specification section. In another embodiment exemplified by claim 14, the intellectual property can be a patent document such as a patent or a patent application and wherein the first portion comprises a prior art section, the second portion comprises a description section, and the third portion comprises a claim section, further comprising cross-referencing an element in the claim section against one or more references to the element in the one or more related external documents.

The combination is an impermissible reconstruction of the instant invention using hindsight from the teachings of the present application. Even with the benefit of hindsight, the combination of Gonzales and Sweet results in an inoperative system. The combination cannot provide the benefit of the inventive system, which includes the ease of reviewing or comprehension of a document (such as a PDF copy of a patent) through explanatory links. For example, with the invention, a word in the third portion (the claim) of a document can be linked with a corresponding word in the second portion (the description) in the same document so that a reader can quickly ascertain and readily interpret the meaning of the wording used in the claim. In this example, the first section (the cited art) contains links that when selected brings up an external document viewable using a viewer such as a PDF viewer.

The combination of references proposed in the Office Action would render the construction of the references impracticable for their intended purposes. The combination of Gonzales and Sweet would result in web pages that may be linked to a PDF document specified by a URL and other documents linked to the initial documents. However, the combination of Gonzales and Sweet is inoperative as they don't provide specifically for first, second and third portions where the first portion links reference external documents viewable using a viewer and third portion links

referencing information in the second portion. If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). In this case, there is no motivation to combine.

Moreover, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) (Claims were directed to an apparatus for producing an aerated cementitious composition by drawing air into the cementitious composition by driving the output pump at a capacity greater than the feed rate. The prior art reference taught that the feed means can be run at a variable speed, however the court found that this does not require that the output pump be run at the claimed speed so that air is drawn into the mixing chamber and is entrained in the ingredients during operation. Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." 916 F.2d at 682, 16 USPQ2d at 1432.). See also *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992) (flexible landscape edging device which is conformable to a ground surface of varying slope not suggested by combination of prior art references).

There was no reasonable expectation of success when combining the references. Evidence showing there was no reasonable expectation of success may support a conclusion of nonobviousness. *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976) (Claims directed to a method for the commercial scale production of polyesters in the presence of a solvent at superatmospheric pressure were rejected as obvious over a reference which taught the claimed method at atmospheric pressure in view of a reference which taught the claimed process except for the presence of a solvent. The court reversed, finding there was no reasonable expectation that a process combining the prior art steps could be successfully scaled up in view of unchallenged evidence showing that the prior art processes individually could not be commercially scaled up successfully.). See also *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 1207-08, 18 USPQ2d 1016, 1022-23 (Fed. Cir.), cert. denied, 502 U.S. 856 (1991) (In the context of a biotechnology case, testimony supported the conclusion that the references did not show that there was a reasonable expectation of success.); *In re O'Farrell*, 853 F.2d 894, 903, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988) (The court held the claimed method would have been obvious over the prior art relied upon because one reference contained a detailed enabling methodology, a suggestion to

modify the prior art to produce the claimed invention, and evidence suggesting the modification would be successful.).

In sum, Applicant notes that the invention is not about a web page with links pointing to points within the document or to another document, but specifically about a portable electronic document having three portions and wherein the third portion is interpreted based on information provided in the second portion. Since Gonzales and Sweet fails to teach these limitations, they cannot render the independent claims obvious.

Moreover, Gonzales and Sweet fail to teach the language of the dependent claims. For example, as to claim 2, there is no showing that Gonzales and Sweet teach a document in a portable document format (PDF), where one or more links are embedded in the first portion referencing one or more external documents viewable using a PDF viewer application; and where one or more links are embedded in the third portion of the PDF document referencing information contained in the second portion of the PDF document. The Final Office Action is silent on these limitations and thus the rejection should be withdrawn.

As to claim 3, there is no showing of the elements of claim 2, with the addition of encapsulating said one or more links into said PDF file. The Final Office Action is silent on these limitations and thus the rejection should be withdrawn.

As to claim 4, there is no showing of a PDF viewer application to render a PDF file, where one or more links are embedded in the first portion referencing one or more external documents viewable using the PDF viewer application; and where one or more links are embedded in the third portion of the PDF document referencing information contained in the second portion of the PDF document. The Final Office Action is silent on these limitations and thus the rejection should be withdrawn.

As to claim 5, the references do not suggest or teach embedding one or more links in the first portion referencing one or more external documents viewable using a viewer application; and embedding one or more links in the third portion referencing information contained in the second portion, and retrieving one or more pages of an external document referenced by a link in the first portion and consolidating all pages into the external document. Page 6-7 of the Final Office Action notes that Sweet shows a web page integrator. However, the web page integrator does not show the links in the third portion referencing information in the second portion and the rejection should be withdrawn.

As to claim 6, the references are completely devoid of showing a patent or a patent application and wherein the first portion comprises a prior art section, the second portion comprises a description section, and the third portion comprises a claim section, comprising cross-referencing an element in the claim section against one or more references to the element in the specification section. The Final Office Action improperly brushed aside specific claim limitations and noted that the specifics recited in the claims are nugatory since "...a description, claim, and prior art are simply text." The references are simply silent on the patent or patent application limitations, and the Examiner cannot simply ignore limitations in the claim 6.

Per MPEP Section 2143.01:

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In *In re Kotzab*, the claims were drawn to an injection molding method using a single temperature sensor to control a plurality of flow control valves. The primary reference disclosed a multizone device having multiple sensors, each of which controlled an associated flow control valve, and also taught that one system may be used to control a number of valves. The court found that there was insufficient evidence to show that one system was the same as one sensor. While the control of multiple valves by a single sensor rather than by multiple sensors was a "technologically simple concept," there was no finding "as to the specific understanding or principle within the knowledge of the skilled artisan" that would have provided the motivation to use a single sensor as the system to control more than one valve. 217 F.3d at 1371, 55 USPQ2d at 1318.

In *In re Fine*, the claims were directed to a system for detecting and measuring minute quantities on nitrogen compounds comprising a gas chromatograph, a converter which converts nitrogen compounds into nitric oxide by combustion, and a nitric oxide detector. The primary reference disclosed a system for monitoring sulfur compounds comprising a chromatograph, combustion means, and a detector, and the secondary reference taught nitric oxide detectors. The examiner and Board asserted that it would have been within the skill of the art to substitute one type of detector for another in the system of the primary reference, however the court found there was no support or explanation of this conclusion and reversed.

The instant case is similar to *In re Fine* in that the Office Action asserted that it would have been within the skill of the art to treat patent limitations as simply text. In this case, there was no support or explanation of this conclusion and the rejection should be withdrawn.

As to claim 7, the references do not show the specifics of cross-referencing the element in the claim section against one or more references to the element in the one or more external documents. Again, the Final Office Action improperly ignores claim limitations and thus the rejection should be withdrawn.

As to claim 10, the references do not teach or suggest retrieving a file history for the patent or the patent application and cross-referencing the element in the claim section against one or more references to the element in the file history. The Final Office Action improperly ignored express limitations in the claim and thus the rejection should be withdrawn.

As to claim 11, there is no teaching of cross-referencing the element against equivalent terminology for the element in the specification section or in the one or more external documents. The Final Office Action ignores salient limitations in the claim and thus the rejection should be withdrawn.

As to claim 12, there is no showing that the references perform searching a database for related external documents in conjunction with an electronic document having first, second and third portions, and where the method includes embedding one or more links in the first portion referencing one or more external documents viewable using a viewer application; and embedding one or more links in the third portion referencing information contained in the second portion. As to claim 13, there is no further showing of claim 12 and the database being located on the Internet.

As to claim 14, the references fail to show claim 1 and further wherein the electronic document comprises a patent or a patent application and wherein the first portion comprises a prior art section, the second portion comprises a description section, and the third portion comprises a claim section, further comprising cross-referencing an element in the claim section against one or more references to the element in the one or more related external documents. The Final Office Action improperly ignored express limitations in the claim and thus the rejection should be withdrawn

As to claim 15, the references do not show mapping intellectual property for an industry covered by the patent or the patent application. The Final Office Action improperly ignored express limitations in the claim and thus the rejection should be withdrawn

As to claims 19-21, as discussed above for claim 1, the references do not show an electronic document having first, second and third portions, and where the method includes embedding one or more links in the first portion referencing one or more external documents viewable using a viewer application; and embedding one or more links in the third portion

referencing information contained in the second portion. Withdrawal of the Section 103 rejection on these claims is requested.

Applicants have provided evidence pointing away from obviousness and in accordance with MPEP Section 2143.01:

If the examiner determines there is factual support for rejecting the claimed invention under 35 U.S.C. 103, the examiner must then consider any evidence supporting the patentability of the claimed invention, such as any evidence in the specification or any other evidence submitted by the applicant. The ultimate determination of patentability is based on the entire record, by a preponderance of evidence, with due consideration to the persuasiveness of any arguments and any secondary evidence. In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). The legal standard of "a preponderance of evidence" requires the evidence to be more convincing than the evidence which is offered in opposition to it. With regard to rejections under 35 U.S.C. 103, the examiner must provide evidence which as a whole shows that the legal determination sought to be proved (i.e., the reference teachings establish a prima facie case of obviousness) is more probable than not.

When an applicant submits evidence, whether in the specification as originally filed or in reply to a rejection, the examiner must reconsider the patentability of the claimed invention. The decision on patentability must be made based upon consideration of all the evidence, including the evidence submitted by the examiner and the evidence submitted by the applicant. A decision to make or maintain a rejection in the face of all the evidence must show that it was based on the totality of the evidence. Facts established by rebuttal evidence must be evaluated along with the facts on which the conclusion of obviousness was reached, not against the conclusion itself. In re Eli Lilly & Co., 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990).

In view of the foregoing, withdrawal of the rejection of all claims is requested.

II. CLAIMS 8-9 ARE PATENTABLE UNDER 35 U.S.C. 103(A) OVER GONZALES IN VIEW OF SWEET ET AL AND FOQEL ET AL., US 2004/0059994.

Claims 8-9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gonzales in view of Sweet et al, and further in view of Foquel et al., US 2004/0059994. Foquel relates to a method for checking semantic and syntactical correctness of patent claims. The method first checks for sequential claims numbering. For each claim a type and dependency are determined and the dependencies are checked for type match. Each claim is then parsed and checked for syntactical correctness and for correct antecedent basis for all its terms.

A careful review of the references do not suggest combining the references to arrive at systems and methods for providing an electronic document having first, second and third portions by embedding one or more links in the first portion referencing one or more external documents

viewable using a viewer application; and embedding one or more links in the third portion referencing information contained in the second portion. Moreover, there is no suggestion to combine Gonzales with a document where the first portion comprises a prior art section, the second portion comprises a description section, and the third portion comprises a claim section, comprising cross-referencing an element in the claim section against one or more references to the element in the specification section and where one or more claims are visualized in a tree view. Similarly, there is no suggestion where the document supports drilling down details of each claim in the tree view. Since these recitations are not present in Gonzales, Sweet or Foquel, the rejection must be withdrawn and the claims allowed. The legal reasons supporting Applicant are discussed above, and Applicant incorporates by reference the legal section discussed above to maintain brevity. Withdrawal of the rejection on claims 8-9 is requested.

III. CLAIMS 16-17 ARE PATENTABLE UNDER 35 U.S.C. 103(A) OVER GONZALES IN VIEW OF SWEET ET AL. AND MAHONEY ET AL., US 5,999,664.

Claims 16-17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gonzales in view of Sweet et al., and further in view of Mahoney et al., US 5,999,664. Mahoney relates to a document search system that provides a user with a programming interface for dynamically specifying features of documents recorded in a corpus of documents. Mahoney notes that "[m]any of the documents that make up the corpus are documents that cannot be identified by simply performing text based searches. In some instances, some documents in the corpus may, for example, be scanned images of hardcopy documents, or images derived using PDF (Portable Documents Formats), or PostScript. In other instances, simply searching the text of documents may not narrow a search sufficiently to locate a particular document in the corpus." Col. 1, lines 34-40.

First, claims 16-18 are allowable as they depend from allowable independent claims. To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Second, there is no showing that Gonzales, Sweet, and Mahoney show the claimed links in the first portion referencing one or more external documents viewable using a viewer application; and links in the third portion referencing information contained in the second portion with generated text using optical character recognition (OCR) from an image of a page of the document and associated with the corresponding location of the text in the image.

Mahoney actually points in the opposite direction of OCR: "In operation, a bitmap image of a document is analyzed by the document search system to identify layout objects such as text blocks or graphics. Subsequently, the document search system computes a set of attributes for each of the identified layout objects. The set of attributes which are identified are used to describe the layout structure of a page image of a document in terms of the spatial relations that layout objects have to frames of reference that are defined by other layout objects. After computing attributes for each layout object, a user can operate the programming interface to define unique document features. Each document feature is a routine defined by a sequence of selections operations which consume a first set of layout objects and produce a second set of layout objects. The second set of layout objects constitutes the feature in a page image of a document." Mahoney Abstract.

There is no suggestion to combine as Mahoney points away from the use of OCR as follows:

A disadvantage of OCR techniques is that they are often an insufficient means for capturing information in scanned documents because the quality of OCR results may be unacceptably poor. For example, the OCR results for a scanned document may be poor in quality because the original document was a heavily used original, a facsimile of an original, or a copy of an original. In each of these examples, the scanned results of an original document may provide insufficient information for an OCR program to accurately identify the text within the scanned image. In some instances, some scanned documents may be handwritten in whole or in part, thereby making those portions of the original document unintelligible to an OCR program.

Another disadvantage of OCR techniques is that the layout or formatting of the document is typically not preserved by an OCR program. As recognized by Blomberg et al. in "Reflections on a Work-Oriented Design Project" (published in PDC'94: Proceedings of the Participatory Design Conference, p. 99-109, on Oct. 27-28, 1994), users searching for a particular document in a large corpus of documents tend to rely on clues about the form and structure of the documents. Such clues, which could be gained from either the original bitmap image or reduced scale images (i.e., thumbnails), tend to be lost in ASCII text renderings of images. Thus, the layout or formatting of a document, which is usually not captured or preserved when a scanned image is reduced to text using an OCR program, is crucial information that can be used for identifying that document in a large corpus of documents. Improved OCR programs such as TextBridge.RTM., which is produced by Xerox ScanSoft, Inc., are capable of converting scanned images into formatted documents (e.g. HTML (hypertext markup language)) with tables and pictures as opposed to a simple

ASCII text document (more information can be found on the Internet at <http://www.xerox.com/xis/textbridge/>). Col. 3 lines 15-51.

Hence, Mahoney points away from combining the references to arrive at claims 16-17. A careful review of the references do not suggest combining the references to arrive at systems and methods for providing an electronic document having first, second and third portions by embedding one or more links in the first portion referencing one or more external documents viewable using a viewer application; and embedding one or more links in the third portion referencing information contained in the second portion. Moreover, there is no suggestion to combine the references to provide generating text using optical character recognition (OCR) from an image of a page of the document and associating the text with the corresponding location of the text in the image. The references do not suggest the additional recitation of text searchable PDF document. There is no suggestion of additional saving user annotation in the document. Similarly, as to claim 17, there is no showing that the document is text searchable PDF document. For these reasons, the rejections should be withdrawn and all claims allowed.

Here, each reference, singly or in combination, does not teach or suggest all the claim limitations in the independent claims as well as each dependent claims. Since the teaching or suggestion to make the claimed combination and the reasonable expectation of success is not found in the references, there is an inference that it came from Applicants' disclosure. In view of the foregoing, withdrawal of the rejection of claims 16-17 is requested.

IV. CLAIM 18 IS PATENTABLE OVER GONZALES, IN VIEW OF SWEET ET AL., AND FURTHER IN VIEW OF BARGERON ET AL., US 2004/0205542 AL, 10/14/04.

Claim 18 was rejected under 35 U.S.C. 103(a) as being unpatentable over Gonzales, in view of Sweet et al., and further in view of Bargerion et al., US 2004/0205542 AL, 10/14/04.

Applicant respectfully traverses the rejection of claim 18. First, neither Gonzales nor Sweet shows each element in the independent claim 1. To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Claim 18 is allowable as it depends from allowable claim 1. Moreover, each reference, singly or in combination, does not teach or suggest all the claim limitations in the independent claims as well as dependent claim 18. The references fail to disclose saving user annotation in the document having embedded links in the first portion referencing one or more external documents viewable using a viewer application; and embedded links in the third portion referencing information contained in the second portion.

Additionally, Barger's paragraph 0005 states that "Robust anchoring of annotations to content is described herein. According to one aspect, an annotation is associated with a particular portion of content by capturing multiple features of the portion. These features include one or more features describing a beginning point of the portion, one or more features describing an ending point of the portion, and one or more features describing the portion between the beginning point and the ending point. According to one implementation, these one or more features are captured independently of a format used to store the content."

Based on the teachings of paragraph 5, one skilled in the art would not be motivated to combine Gonzales, Swee and Barger in saving user annotation in the document having embedded links in the first portion referencing one or more external documents viewable using a viewer application; and embedded links in the third portion referencing information contained in the second portion.

Further, Applicant submits that the combination was done using hindsight. Since the teaching or suggestion to make the claimed combination and the reasonable expectation of success is not found in the references, there is an inference that the suggestion uses impermissible hindsight from Applicants' disclosure.

In view of the foregoing, withdrawal of the rejection of all claims is requested.

CONCLUSION

Applicant requests allowance of all claims. If for any reason the Examiner believes that a telephone conference would in any way expedite prosecution of the subject application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,



Bao Tran
Reg. No. 37,955

CLAIMS APPENDIX

1. (Original) A method for providing an electronic document having first, second and third portions, comprising:

 embedding one or more links in the first portion referencing one or more external documents viewable using a viewer application; and

 embedding one or more links in the third portion referencing information contained in the second portion.
2. (Original) The method of claim 1, wherein said document is a portable document format (PDF) document residing in a PDF file.
3. (Original) The method of claim 2, comprising encapsulating said one or more links into said PDF file.
4. (Original) The method of claim 1, wherein said viewer application is a PDF viewer application.
5. (Original) The method of claim 1, comprising retrieving one or more pages of an external document referenced by a link in the first portion and consolidating all pages into the external document.
6. (Original) The method of claim 1, wherein the electronic document comprises a patent or a patent application and wherein the first portion comprises a prior art section, the second portion comprises a description section, and the third portion comprises a claim section, comprising cross-

referencing an element in the claim section against one or more references to the element in the specification section.

7. (Original) The method of claim 6, comprising cross-referencing the element in the claim section against one or more references to the element in the one or more external documents.

8. (Original) The method of claim 6, comprising visualizing one or more claims in a tree view.

9. (Original) The method of claim 8, further comprising drilling down details of each claim in the tree view.

10. (Original) The method of claim 6, further comprising retrieving a file history for the patent or the patent application and cross-referencing the element in the claim section against one or more references to the element in the file history.

11. (Original) The method of claim 6 or 7, further comprising cross-referencing the element against equivalent terminology for the element in the specification section or in the one or more external documents.

12. (Original) The method of claim 1, comprising searching a database for related external documents.

13. (Original) The method of claim 13, wherein the database is located on the Internet.

14. (Original) The method of claim 13, wherein the electronic document comprises a patent or a patent application and wherein the first portion comprises a prior art section, the second portion comprises a description section, and the third portion comprises a claim section, further comprising cross-referencing an element in the claim section against one or more references to the element in the one or more related external documents.

15. (Original) The method of claim 13, comprising mapping intellectual property for an industry covered by the patent or the patent application.

16. (Original) The method of claim 1, comprising generating text using optical character recognition (OCR) from an image of a page of the document and associating the text with the corresponding location of the text in the image.

17. (Original) The method of claim 16, wherein the document is text searchable PDF document.

18. (Original) The method of claim 1, comprising saving user annotation in the document.

19. (Original) An apparatus for providing an electronic document having first, second and third portions, comprising:

one or more links embedded in the first portion referencing one or more external documents viewable using a viewer application;

one or more links embedded in the third portion referencing information contained in the second portion.

20. (Original) A system for providing access to a document stored in a computer-readable medium and executable by a computer, comprising:

one or more links embedded in the first portion referencing one or more external documents viewable using a viewer application;

one or more links embedded in the third portion referencing information contained in the second portion.

21. (Original) A computer readable media containing executable computer program instructions which when executed on a digital processing system causes the system to perform a method comprising:

embedding one or more links in the first portion referencing one or more external documents viewable using a viewer application; and

embedding one or more links in the third portion referencing information contained in the second portion.

EVIDENCE APPENDIX
NONE

RELATED PROCEEDINGS APPENDIX
NONE

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.